

AMENDMENTS TO THE CLAIMS

1-2 (cancelled)

3. – 10 (Cancelled)

11. (New) A thermal detection system comprising at least two uninsulated, metal, power supply bus bars having a predetermined current limit connected to a plural pole circuit breaker which contains a shunt trip module, where each bus bar is contacted along at least part of its length with a resistance temperature detector adhesive tape strip that reacts to changes in temperature by changing its resistivity and where a heat detection measurement module is electrically connected to each resistance temperature detector adhesive tape strip, and to the shunt trip module, where the heat detection module is preset to allow current to energize the shunt trip module and shut down the circuit breaker if the temperature anywhere along the bus bar adhesive tape strip contact points is measured by the heat detection measurement module to be greater than the current limit preset; and

~~The thermal detection system of Claim 8, wherein~~ the heat detection measurement module is an electrical bridge circuit that comprises three open resistors and a variable resistor preset switch, with an associated voltage source.

12. (Cancelled)